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IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Meyer, et al.

Confirmation No.:

Application No.: 10/822,064

Examiner:

Filing Date: 04/08/2004

Group Art Unit:

Title: Bonding An Interconnect To A Circuit Device And Related Devices

Mail Stop Amendment
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

This Information Disclosure Statement is submitted:

- ☒ under 37 CFR 1.97(b), or
(Within three months of filing national application; or date of entry of national application; or before mailing date of first office action on the merits; whichever occurs last)
- ☐ under 37 CFR 1.97 (c) together with either a:
☐ Statement under 37 CFR 1.97(e), or
☐ a \$180.00 fee under 37 CFR 1.17(p), or
(After the CFR 1.97 (b) time period, but before final action or notice of allowance, whichever occurs first)
- ☐ under 37 CFR 1.97 (d) together with a:
☐ Statement under 37 CFR 1.97(e)(1) or (2), and
☐ a \$180.00 fee set forth in 37 CFR 1.17(p).
(Filed after final action, a notice of allowance, on or before payment of the issue fee)

Please charge to Deposit Account 08-2025 the sum of \$0.00. At any time during the pendency of this application, please charge any fees required or credit any overpayment to Deposit Account 08-2025 pursuant to 37 CFR 1.25.

☒ Applicant(s) submit herewith Form PTO 1449 - Information Disclosure Statement together with any required copies of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe(s) may be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR 1.56.

☐ A concise explanation of the relevance of foreign language patents, foreign language publications and other foreign language information listed on PTO Form 1449, as presently understood by the individual(s) designated in 37 CFR 1.56 (c) most knowledgeable about the content is given on the attached sheet, or where a foreign language patent is cited in a search report or other action by a foreign patent office in a counterpart foreign application, an English language version of the search report or action which indicates the degree of relevance found by the foreign office is listed on form PTO 1449 and is enclosed herewith.

It is requested that the information disclosed herein be made of record in this application.

☒ I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Alexandria, VA 22313-1450. Date of Deposit: 7/1/04

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Typed Name: Laurie Morgan

Signature: Laurie Morgan

Respectfully submitted,

Meyer, et al.

By Michael K. Colby

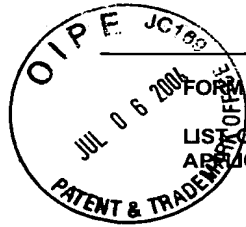
Michael K. Colby

Attorney/Agent for Applicant(s)

Reg. No. 45,816

Date: 7/9/04

Telephone No.: (509) 324-9256



LIST OF PATENTS AND PUBLICATIONS FOR
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STATEMENT

(Use several sheets if necessary)

ATTY. DOCKET NO.

200312670-1

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REFERENCE DESIGNATION

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	PUBLICATION DATE	NAME	Pages, Columns, Lines Where Relevant Passages or Figures Appear
	1A 6284072	09/04/2001	Ryan, et al.	
	1B 6348999	02/19/2002	Summersgill, et al.	
	1C 5985084	11/16/1999	Summersgill, et al.65	
	1D 6517995	02/11/2003	Jacobson, et al.	
	1E 6341190	01/22/2002	Sumersgill, et al.	
	1F			
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FOREIGN PATENT DOCUMENTS

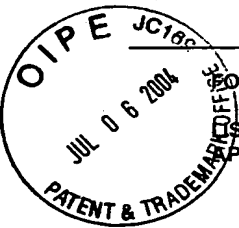
	DOCUMENT NUMBER	PUBLICATION DATE	NAME OF PATENTEE OR APPLICANT	Pages/Columns/Lines Where Relevant Passages/Figures Appear	Check if Translation attached
	1L WO196/35971	11/14/1996	Epigem Limited		
	1M WO01/11591	02/15/2001	Epigem Limited		
	1N WO98/21626	05/22/1998	Epigem Limited		
	1O				
	1P				

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

1Q	"High-resolution soft lithography"; IBM Zurich Research Laboratory, Science & Technology, Microcontact processing; http://www.zurich.ibm.com/st/microcontact/highres/ .
1R	"Replica Molding (REM)"; Lithotemplate.html.; http://www.ee.washington.edu/research/microtech/cam/CAMreplicamolding.html .
1S	SCHWARTZ; "Numerical modeling of liquid withdrawal from gravure cavities in coating operations; the effect of cell pattern"; Journal of Engineering Mathematics 42: 243-253,2002;

EXAMINER

DATE CONSIDERED



FORM PTO-1449

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	2L					
	2M					
	2N					
	2O					
	2P					

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

2Q	"Coating Techniques"; Coating Techniques - Gravure Coating; http://www.ferron-magnetic.co.uk/coatings/gravure.htm .
2R	TAN, et al; "Roller nanoimprint lithography"; J. VAc. Sci. Technol. B 16(6), Nov/Dec 1998; pp. 3926-3928.
2S	"The Yasui Seiki "Micro Gravure" Coating Method"; www.yasui.com ; pp. 1-10.

EXAMINER

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FORM PTO-1449

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	3A				
	3B				
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	3L					
	3M					
	3N					
	3O					
	3P					

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

3Q	STIX; "Breaking the Mold"; http://www.sciam.com/print_version.cfm?articleID= 0000AAB9-BAF8-1D07-8E49809EC5... ; 2 pages.
3R	"Continuous coating pilot plant"; ichemco; http://www.ichemco.it/eng/pilot.htm .; 4 pages.
3S	"Norland Optical Adhesive 83H"; http://www.gentec.be/noa83h.htm .; 2 pages.

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	4O					
	4P					

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4Q	"Norland Optical Adhesive 83H" I http://www.norlandprod.com/adhesives/noa83h.html ; 2 pages.
4R	SHEPHERD; "Modern coating technology systems, for paper, film and foil"; Frank Shepherd 1995; ISBN 0 902098. 6 pages.
4S	MICHEL, et al; "Printing meets lithography: Soft approaches to high-resolution patterning"; IBM J. Res. & Dev. Vol., 45, No. 5; September 2001; pp. 697-719.

EXAMINER

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FORM PTO-1449 LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)	ATTY. DOCKET NO.	APPLICATION NO.	CONFIRMATION NO.
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	5P					

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

5Q	LEE, et al; "Design and Fabrication of CD-Like Microfluidic Platforms for Diagnostics: Polymer-Based Microfabrication"; Biomedical Microdevices 3:4, 339-351, 2001; pp. 339-351.
5R	MA, et al.; "Low Temperature Bonding for Wafer Scale Packaging and Assembly of Micromachined Sensors"; 1998-1999; 3 pages.
5S	GILLMOR, et al.; "Low-Contact-Angle Polydimethyl Siloxane (PDMS) Membranes for Fabricating Micro-Bioarrays"; Now at Biology and Biomedical Sciences, Yale University. 6 pages.

EXAMINER

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OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

6Q	EFIMENKO, et al; "Surface Modificatin of Sylgard-184 Poly (dimethyl siloxane) Networks by Ultraviolet and Ultraviolet/Ozone Treatment"; Journal of Colloid and Interface Science 254, 306-315 (2002) doi: 10.1006/jcis.2002.8594. pp. 306-315.
6R	"Micro-Contact Printing (uCP)"; Lithotemplate.html; http://www.ee.washington.edu/research/microtech/cam/CAMmicrocontactprinting.html ; 2 pages.
6S	"High-resolution microcontact printing of SAMs"; IBM Zurich Research Laboratory, Science & Technology, Microcontact processing; http://www.zurich.ibm.com/st/microcontact/highres/mucp.html .; 2 pages.

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OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

7Q	WHITESIDES; "Soft Lithography"; http://www.wtec.org/loyola/nano/US.Review/04_02.html ; 4 pages.
7R	STIX; "Soft Manufacturing; Shaping small structures in rubber has moved beyond a Harvard lab"; Scientific American.com; 2 pages.
7S	"Teflon AF: A new Generation of High-Performance Fluoropolymer Resins"; http://www.dupont.com/teflon/af/ . 1 page.

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	8L					
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	8N					
	8O					
	8P					

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

8Q	Silicone-based Adhesives; Industrial and Electronics Products; www.adhesiversresearch.com/catalog/indsil.htm
8R	
8S	

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